

136-831 7W DTW specific configuration
Spot | Ø85mm | round | black | 5/7W | 3CCT/DTW

Introduction

Purpose of this Document

This document provides information for 136-831 7W DTW. During measurement, the product is used in a different mode where output power, colour temperature and/or beam angle are changed from factory standard. These adjustments can be made without altering the product and are designed to be set by the installer. In most cases, the options are set through switches on the product.

Results

Total input power	6.5 W
Correlated Colour Temperature	3288 K
Total lumen output	373 lm
Efficiency	57 lm/W

Electrical measurement details

Input Power

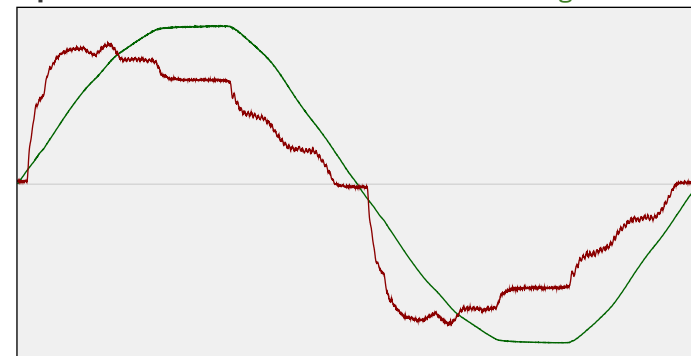
RMS Input voltage feed. V_{RMS}	232 V
RMS Input current feed. I_{RMS}	0.031 A
Total input power	6.5 W

Frequency of input power	50 Hz
Power factor	0.92
Displacement power factor	0.94

Total harmonic distortion of the current	22.69%
Total harmonic distortion of the voltage	2.69%

Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 20.0%



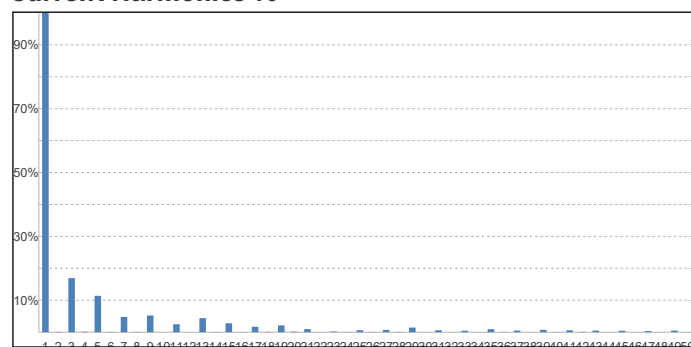
Lumen efficiency: 57 lm/W



Harmonics

3rd Harmonic	16.93%
5th Harmonic	11.39%
7th Harmonic	4.76%
9th Harmonic	5.23%
11th Harmonic	2.49%

Current Harmonics %



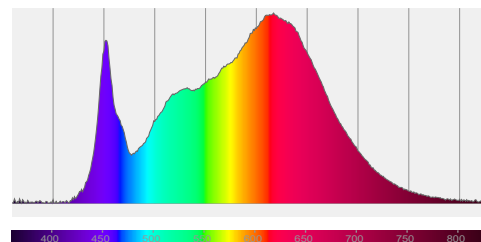
136-831 7W DTW specific configuration

Colour measurement details

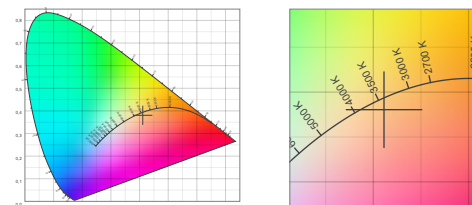
Total lumen output 373 lm
 Correlated Colour Temperature 3288 K
 Colour coordinates CIE 1931 (x;y) = (0.411;0.380)
 Colour deviation from BBL Duv = -0.0058

TM30-18 Colour Fidelity Index R_f 92.3
 TM30-18 Colour Gamut Index R_g 102.0
 Colour Rendering Index (Ra) CRI 95.4
 Colour Rendering Index. (red component) $R_9 = 72.3$

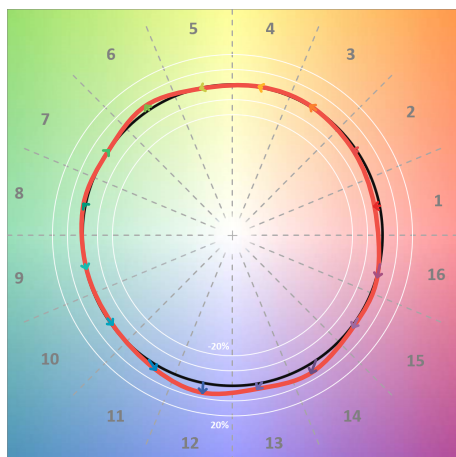
Colour Quality Scale CQS = 92.1
 Television Lighting Consistency Index TLCI = 92



Relative spectral power distribution



TM30 details

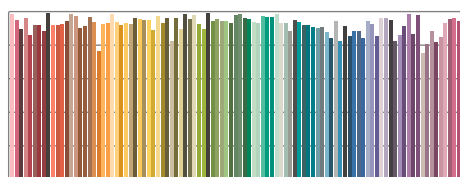


TM30 Colour vectors per hue bin

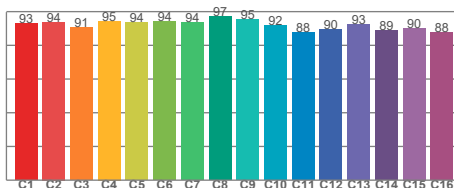


TM30 Colour distortion

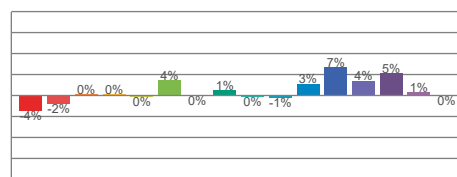
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	93	-4%	0%
C2	94	-2%	3%
C3	91	0%	5%
C4	95	0%	2%
C5	94	0%	2%
C6	94	4%	0%
C7	94	0%	-1%
C8	97	1%	-1%
C9	95	0%	3%
C10	92	-1%	5%
C11	88	3%	7%
C12	90	7%	1%
C13	93	4%	-4%
C14	89	5%	-7%
C15	90	1%	-6%
C16	88	0%	-9%



TM30-18 R_f -values per reference colour

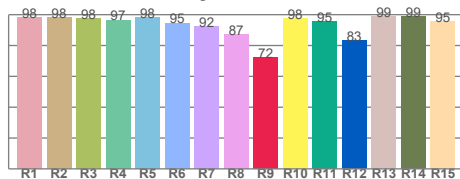


TM30-18 R_f -values per hue bin

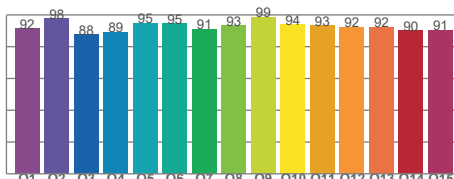


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale